ABSTRACT

Energy-aware software control in a computer system requires a plurality of displays. At least two of the displays have diverse attributes that enable reduction in the energy consumption of the computer system. The energy-aware software control involves profiling screen usage patterns and their impact on energy consumption by the displays and in turn by the computer system. The profiling results in an energy model. A determination is made when to activate (or deactivate) the energy-aware software control of the displays in order to decrease their energy consumption. Under the energy-aware software control, and guided by the energy model, a screen fashioned by one or more applications is divided up into sub-screens. Then, the energy needs associated with the sub-screens are matched to particular displays in accordance with their respective attributes and the energy model. The idea is to put the sub-screens on view by matched and likely different displays without significantly diminishing the user experience.

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